STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

Mr. Daniel Heald
Plant Manager
Indeck Maine Energy, LLC
P.O. Box 317, Route #2
West Enfield, Maine 04493

July 25, 2005

RE: Maine Waste Discharge License (WDL) Application #W006116-5S-G-M
Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0023213
Final Permit/License

Dear Mr. Heald:

Enclosed please find a copy of your **final** MEPDES permit/ WDL which was approved by the Department of Environmental Protection. You must follow the conditions in the permit to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

We would like to make you aware of the fact that your monthly Discharge Monitoring Reports (DMR) may not reflect the revisions in this permitting action for several months however, you are required to report applicable test results for parameters required by this permitting action that do not appear on the DMR. Please see the attached April 2003 O&M Newsletter article regarding this matter.

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood
Division of Water Resource Regulation
Bureau of Land and Water Quality

Enc.
cc: Tanya Hovell, DEP/EMRO
David Webster, USEPA

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 764-1507

web site: www.state.me.us/dep

DMR Lag

(reprinted from April 2003 O&M Newsletter)

When the Department renews discharge permits, the parameter limits may change or parameters may be added or deleted. In some cases, it is merely the replacement of the federally issued NPDES permit with a state-issued MEPDES permit that results in different limits. When the new permit is finalized, a copy of the permit is passed to our data entry staff for coding into EPA's Permits Compliance System (PCS) database. PCS was developed in the 1970's and is not user-friendly. Entering or changing parameters can take weeks or even months. This can create a lag between the time your new permit becomes effective and the new permit limits appearing on your DMRs. If you are faced with this, it can create three different situations that have to be dealt with in different ways.

1. If the parameter was included on previous DMRs, but only the limit was changed, there will be a space for the data. Please go ahead and enter it. When the changes are made to PCS, the program will have the data and compare it to the new limit.

2. When a parameter is eliminated from monitoring in your new permit, but there is a delay in changing the DMR, you will have a space on the DMR that needs to be filled. For a parameter that has been eliminated, please enter the space on the DMR for that parameter only with "NODI-9" (No Discharge Indicator Code #9). This code means monitoring is conditional or not required this monitoring period.

3. When your new permit includes parameters for which monitoring was not previously required, and coding has not caught up on the DMRs, there will not be any space on the DMR identified for those parameters. In that case, please fill out an extra sheet of paper with the facility name and permit number, along with all of the information normally required for each parameter (parameter code, data, frequency of analysis, sample type, and number of exceedances). Each data point should be identified as monthly average, weekly average, daily max, etc. and the units of measurement such as mg/L or lb/day. Staple the extra sheet to the DMR so that the extra data stays with the DMR form. Our data entry staff cannot enter the data for the new parameters until the PCS coding catches up. When the PCS coding does catch up, our data entry staff will have the data right at hand to do the entry without having to take the extra time to seek it from your inspector or from you.

   EPA is planning significant improvements for the PCS system that will be implemented in the next few years. These improvements should allow us to issue modified permits and DMRs concurrently. Until then we appreciate your assistance and patience in this effort.

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

INDECK MAINE ENERGY, LLC.	)	MAINE POLLUTANT DISCHARGE
ENFIELD, PENOBSCOT COUNTY, MAINE	)	ELIMINATION SYSTEM PERMIT
ELECTRICAL GENERATING STATION	)	AND
#W006116-5S-G-M	)	WASTE DISCHARGE LICENSE
ME0023213 **APPROVAL**	)	**MODIFICATION/RENEWAL**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq., and Maine Law 38 M.R.S.A., Section 414-A et. seq., and all applicable regulations, the Department of Environmental Protection (Department hereinafter) has considered the application of the INDECK MAINE ENERGY, LLC (Indeck hereinafter), with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

a. Application - Indeck has applied to the Department for modification of Department Waste Discharge License (WDL) #W006116-5S-F-R which was issued on September 12, 2003, and is due to expire on September 12, 2008. The 9/12/03 WDL authorized the discharge of up to a daily maximum flow of 150,000 gallons per day (gpd) of cooling tower blowdown, up to a daily maximum of 1,000 gpd of miscellaneous equipment drain water and up to a daily maximum flow of 36,000 gpd of cooling tower sandfilter back wash waters to the Penobscot River, Class B, in Enfield, Maine. Collectively, the flow from the three outfalls was limited to 187,000 gpd.

b. Modification requested –Indeck has requested the Department modify the permit to incorporate the terms and conditions of the Maine Pollutant Discharge Elimination System (MEPDES) permit program and requests coverage in the permit for the discharge of storm water runoff associated with industrial activities from five outfalls. It is noted the discharge of storm water from these outfalls is currently being regulated under a Multi-Sector General Permit (MSGP) issued by the U.S. Environmental Protection Agency (EPA) on October 30, 2000. Once final, storm water discharges will be regulated under the MEPDES permit.

PERMIT SUMMARY

This permitiing action is similar to the 9/12/03 permitting action in that it is carrying forward all limitations and monitoring requirement with the following exceptions:

a. Authorizing the discharge of storm water from five outfalls.

PERMIT SUMMARY (cont'd)

b. Requiring the permittee to maintain an up-to-date storm water pollution prevention plan (SWPPP).

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated April 26, 2005, and revised on July 25, 2005 and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.

2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.

3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:

   a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;

   b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;

   c. The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;

   d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and

   e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the application of INDECK MAINE ENERGY LLC, to discharge up to a daily maximum flow of 150,000 gallons per day (gpd) of cooling tower blowdown, up to a daily maximum of 1,000 gpd of miscellaneous equipment drain water, up to a daily maximum flow of 36,000 gpd of cooling tower sandfilter back wash waters and storm water runoff from five outfalls to the Penobscot River, Class B, in Enfield, Maine. Collectively, the flow from the three non-storm water runoff outfalls is limited to 187,000 gpd. The discharges shall be subject to the attached conditions and all applicable standards and regulations including:

1. "*Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits*," revised July 2, 2001, copy attached.

2. The attached Special Conditions, including any effluent limitations and monitoring requirements.

3. This permit expires five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 26TH DAY OF JULY, 2005.

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: _____
Dawn Gallagher, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application March 8, 2005.

Date of application acceptance March 9, 2005.

Date filed with Board of Environmental Protection

FILED
JUL 27 2005
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

This Order prepared by GREGG WOOD, BUREAU OF LAND & WATER QUALITY

W61165sg 7/25/05

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date of the permit and lasting through permit expiration, the permittee is authorized to discharge cooling tower blowdown from internal **OUTFALL #001** to the Penobscot River. Such discharges shall be limited and monitored by the permittee as specified below:

OUTFALL #001 – Cooling Tower Blowdown

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow [50050]	---	150,000 gpd [03]	---	---	Continuous [99/99]	Meter [MT]
Temperature [00011]	---	---	---	85°F [15]	2/Month [02/30]	Grab [GR]
Free Available Chlorine[(1)] [50060]	---	---	0.2 mg/L [19]	0.5 mg/L [19]	1/Week [01/07]	Grab [GR]
pH [00400]	---	---	---	6.0-9.0 SU [12]	1/Month [01/30]	Grab [GR]

Footnotes:

(1) Neither free available chlorine or total residual chlorine may be discharged from any unit for more than two hours in any one day pursuant to 40 CFR, §423.12(b)(8).

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

2. During the period beginning the effective date of the permit and lasting through permit expiration, the permittee is authorized to discharge low volume waste waters from building and equipment drain waters and storm water from internal **OUTFALL #002** to the Penobscot River. Such discharges shall be limited and monitored by the permittee as specified below:

OUTFALL #002 – Low Volume Waste Waters

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow [50050]	---	1,000 gpd [03]	---	---	Continuous [99/99]	Meter [MT]
Total Suspended Solids [00530]	---	---	30 mg/L [19]	100 mg/L [19]	2/Month [02/30]	Grab [GR]
Oil & Grease [00552]	---	---	---	15 mg/L [19]	2/Month [02/30]	Grab [GR]
Temperature [00011]	---	---	---	80°F [15]	2/Month [02/30]	Grab [GR]
pH [00400]	---	---	---	6.0-9.0 SU [12]	1/Month [01/30]	Grab [GR]

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning the effective date of the permit and lasting through permit expiration, the permittee is authorized to discharge sandfilter backwash waters from internal **OUTFALL #003** to the Penobscot River. Such discharges shall be limited and monitored by the permittee as specified below:

OUTFALL #003 – Sandfilter Backwash Waters

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average as specified	Daily Maximum as specified	Monthly Average as specified	Daily Maximum as specified	Measurement Frequency as specified	Sample Type as specified
Flow [50050]	Report gpd [03]	36,000 gpd [03]	---	---	Continuous [99/99]	Meter [MT]
Total Suspended Solids [00530]	---	---	30 mg/L [19]	100 mg/L [19]	2/Month [02/30]	Grab[(1)] [GR]
pH [00400]	---	---	---	6.0-9.0 SU	1/Month [01/30]	Grab [GR]

Footnotes:

(1) The grab sample for total suspended solids shall be collected within the first four minutes of the commencement of the cycle.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning the effective date of this permit and lasting through permit expiration, the permittee is authorized to discharge storm water runoff from **OUTFALLS #004, #005, #006, #007, #008**.

OUTFALL #004 – Easterly of the cooling towers.
OUTFALL #005 – South of the ash silo.
OUTFALL #008 - Northeasterly of the chip pile.
OUTFALL #006 – Northeasterly of the chip pile.
OUTFALL #007 – Northeasterly of the chip pile.

The permitte is required to maintain an up-to-date storm water pollution prevention plan (SWPPP). The permittee shall develop, maintain and periodically update the Storm Water Pollution Prevention Plan (SWPPP) for the facility. As the site or any operations conducted on it have changed or are expected to change materially or substantially, the permittee shall modify its SWPPP as necessary to include such changes. The permittee shall maintain a copy of the SWPPP and any subsequent revisions at the facility and shall make the plan available to any Department or EPA representative upon request.The SWPPP requirements are intended to facilitate a process whereby the permittee thoroughly evaluates potential pollution sources at the plant and selects and implements appropriate measures to prevent or control the discharge of pollutants in storm water runoff. The process involves the following four steps: (1) formation of a team of qualified facility personnel who will be responsible for preparing the SWPPP and assisting the terminal manager in its implementation; (2) assessment of potential storm water pollution sources; (3) selection and implementation of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the plan to prevent storm water contamination and comply with the terms and conditions of this permit.

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

Footnotes:

Sampling Locations:

Outfall #001 – At the exit of the cooling tower.
Outfall #002 – After the oil/water separator.
Outfall #003 – Off of the pressure line of the back wash piping.

Any change in sampling location(s) must be reviewed and approved by the Department in writing.

Sampling and analysis must be conducted in accordance with; a) methods approved by 40 Code of Federal Regulations (CFR) Part 136, b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or c) as otherwise specified by the Department. Samples that are sent out for analysis shall be analyzed by a laboratory certified by the State of Maine's Department of Human Service.

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated by the classification of the receiving waters.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharges shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

4. Notwithstanding specific conditions of this license the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

C. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit. Discharges of waste water from any other point source are not authorized under this permit, but shall be reported in accordance with Standard Condition B(5)(*Bypass*) of this permit.

SPECIAL CONDITIONS

D. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee shall notify the Department of the following of any substantial change in the volume or character of pollutants being discharged.

E. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report (DMR) forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to a Department Regional Office such that the DMR's are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period. A signed copy of the DMR and all other reports required herein shall be submitted to the following address:

Department of Environmental Protection
Eastern Maine Regional Office
Bureau of Land and Water Quality
Division of Compliance, Engineering & Technical Assistance
106 Hogan Road
Bangor, Maine 04401

F. REOPENING OF THE LICENSE FOR MODIFICATIONS

Upon evaluation of the tests results or monitoring requirements specified in Special Conditions of this licensing action, new site specific information, or any other pertinent test results or information obtained during the term of this license, the Department may, at anytime and with notice to the licensee, modify this license to; 1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded, (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

MAINE POLLUTANTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: **April 25, 2005**
Revised: **July 25, 2005**

MEPDES PERMIT NUMBER: **ME0023213**
WDL NUMBER: **W006116-5S-G-M**

NAME AND ADDRESS OF APPLICANT:

Indeck Maine Energy, LLC.
P.O. Box 317, Route #2
West Enfield, Maine 04493

COUNTY: **Penobscot County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Route #2
West Enfield, Maine 04493

RECEIVING WATER/CLASSIFICATION: **Penobscot River/Class B**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Daniel Heald, Plant Manager**
(207) 732-4151

1. APPLICATION SUMMARY

a. Application - Indeck has applied to the Department for modification and renewal of Department Waste Discharge License (WDL) #W006116-5S-F-R which was issued on September 12, 2003 and is due to expire on September 12, 2008. The 9/12/03 WDL authorized the discharge of up to a daily maximum flow of 150,000 gallons per day (gpd) of cooling tower blowdown, up to a daily maximum of 1,000 gpd of miscellaneous equipment drain water and up to a daily maximum flow of 36,000 gpd of cooling tower sandfilter back wash waters to the Penobscot River, Class B, in Enfield, Maine. Collectiely, the flow from the three outfalls was limited to 187,000 gpd.

1. APPLICATION SUMMARY (cont'd)

b. Modification requested –Indeck has requested the Department modify the permit to incorporate the terms and conditions of the Maine Pollutant Discharge Elimination System (MEPDES) permit program and requests coverage in the permit for the discharge of storm water runoff associated with industrial activities from five outfalls. It is noted the discharge of storm water from these outfalls is currently being regulated under a Multi-Sector General Permit (MSGP) issued by the U.S. Environmental Protection Agency on October 30, 2000. Once final, storm water discharges will be regulated under the MEPDES permit.

2. PERMIT SUMMARY

a. Regulatory - On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine except in certain areas of the State. The Penobscot Indian Nation raised objections to EPA authorizing the State to administer the program for dischargers on the tributaries of and the main stem of the Penobscot River north of Indian Island in Old Town, Maine. The discharge from the Indeck facility fell within the disputed area, therefore, the State of Maine was not authorized to issue a MEPDES permit for the West Enfield facility. However, on October 31, 2003, the EPA authorized the State to administer the NPDES program for all non-tribal facilities including the Indeck facility. Once the MEPDES permit is issued, it will replace the NPDES permit last issued by the EPA on 6/25/86 (issued in the name of former owner/operater Babcock UltraPower) and all terms and conditions of the NPDES permit will become null and void.

b. Permit Limitations and Monitoring Requirements: This permitting action is similar to the 9/12/03 WDL action in that it is carrying forward all limitations and monitoring requirement with the following exceptions:

1. Authorizing the discharge of storm water from five storm water outfalls.

2. Requiring the permittee to maintain an up-to-date storm water pollution prevention plan (SWPPP).

c. History: The most current relevant regulatory actions for the industrial facility include the following:

April 24, 1985 - The Department issued WDL #W006116-44-A-N to Babcock Ultrapower West Enfield.

June 25, 1985 – The EPA issued NPDES permit #ME0023213 to Babcock-Ultrapower West Enfield.

2. PERMIT SUMMARY (cont'd)

May 16, 1986 - The EPA issued a permit modification of NPDES permit #ME0023213 which added Outfall #003, sand filter backwash, to the permit.

May 30, 1986 - The Department issued an amendment to WDL #W006116-44-A-N for the inclusion of Outfall #003.

January 25, 1990 – Babcock Ultrapower West Enfield submitted a timely application to the EPA to renew NPDES permit # ME0023213. It is noted as of the date this permitting action, the EPA has not acted on the renewal application.

May 20, 1991 - The Department issued a renewal of the waste discharge license, WDL #W006116-42-D-R to Bacbcock Ultrapower.

October 10, 1996 - INDECK Power Overseas Limited acquired the West Enfield electric generating station from Babcock-UltraPower.

December 6, 1996 - The EPA issued a letter to INDECK Power Overseas Limited informing the company that NPDES permit #ME0023213 had been transferred from Babcock-UltraPower to INDECK Power Overseas Limited.

December 10, 1996 - The Department transferred all State licenses and permits held by Babcock-UltraPower to INDECK Power Overseas Limited.

December 23, 1996 - INDECK Power Overseas Limited submitted an application to the Department for renewal of WDL #W006116-42-D-R.

January 14, 1997 – The Department issued a renewal of the waste discharge license, WDL #W006116-42-E-R to INDECK Power Overseas Limited.

April 24, 1997 – Indeck Maine Energy, LLC. submitted an application to the Department to transfer all licenses and permits issued by the Department from INDECK Power Overseas Limited to Indeck Maine Energy, LLC.

June 5, 1997 – The Department issued an Order transferring all licenses/permits issued by the Department Department from INDECK Power Overseas Limited to Indeck Maine Energy LLC.

June 6, 1997 – The EPA transferred NPDES permit #ME0023213 from INDECK Power Overseas Limited to Indeck Maine Energy, LLC.

2. PERMIT SUMMARY (cont'd)

August 25, 1997 – The EPA issued a notice to Indeck Maine Energy, LLC informing them that their Notice of Intent (NOI) had been processed by the EPA and that they had coverage under the Multi-Sector General Permit for the discharge of storm water associated with industrial activities.

October 2000 - Indeck Maine Energy, LLC. submitted a (NOI to the EPA for authorization to discharge storm water runoff from five outfalls under the terms and conditions of EPA's Multi-Sector General Permit (MSGP). The EPA subsequently granted coverage under the MSGP.

September 12, 2003 – The Department issued WDL renewal WDL #W006116-5S-F-R for a five year term.

March 8, 2005 – Indeck Maine Energy, LLC submitted an application to the Department to modify the WDL for the facility to incorporate the terms and conditions of the MEPDES permitting program and acknowledge the discharge of storm water runoff associated with industrial activities.

d. Source Description – The facility is engaged in the daily production of approximately 24.5 megawatts of electricity. The Indeck facility is a based-loaded biomass facility whereby wood chips are burned as fuel to produce steam to generate electricity. Waste waters generated at the facility include cooling tower blowdown, building and equipment drain water and minor quantities of storm water that is collected in a sump and sandfilter backwash waters associated with the filtering of river water for use in the cooling tower basin.

All three waste streams described above are independent waste streams that are conveyed to a common outfall prior to discharge to the Penobscot River. The outfall to the river is a pipe measuring 4 inches in diameter that extends out into the river approximately 100 feet, and is located just upstream of the West Enfield Dam. See Attachment A of this Fact Sheet. The end of the outfall pipe is fitted with a diffuser that is approximately 18 feet long with four (4) 2-inch diameter holes spaced five feet on center to enhance mixing of the discharge with the receiving waters.

In addition to the non-process wasters described above, Indeck has requested to obtain coverage under the combination MEPDES/WDL permit for the discharge of storm water associated with industrial activities from five outfalls at the site. Currently those five outfalls are covered under a Multi Sector General Permit (MSGP) which was issued by the EPA on October 30, 2000. Once the combination MEPDES/WDL permit is issued by the Department, Indeck will terminate its coverage under the MSGP

2. PERMIT SUMMARY (cont'd)

According to the facilities current storm water pollution prevention plan (SWPPP), five drainage areas (drainage areas 1 - 5) at the site have been identified. Each drainage area is associated with one outfall. With the exception of drainage area 5, industrial activities occur within each of the drainage areas. The following provides a description of potential storm water pollutants that could be discharged from the five storm water outfalls. See Attachment B.

Drainage Area 1 (Outfall #004,easterly of the cooling tower): - As shown on the Attachment B of this Fact Sheet, this area is located on the south side of the site, encompasses approximately 3.07 acres, and is associated with one (1) discharge point, Outfall 004. Outfall 004 is a 12" corrugated metal pipe that drains a storm water detention basin. The slopes in this area allow storm water to sheet flow across paved and vegetated surface to a grass swale that directs runoff to the detention basin. Industrial activities that have the potential to impact storm water within this drainage area are water treatment, equipment maintenance, and unloading of oils and chemicals into the Maintenance Building. All materials within this area are stored in a building.

Drainage Area 2 (Outfall #005, southerly of the ash silo): As shown on Attachment B of this Fact Sheet, this area is located on the south portion of the site, encompasses approximately 4.01 acres, and is associated with discharge point, Outfall 5. Outfall 5 is an outlet ditch that is a collection point for all runoff from Drainage Area 2. The slopes in this area allow storm water to sheet flow across paved and vegetated surfaces to Outfall 5. Industrial activities that have the potential to impact storm water within this drainage area are ash storage, propane storage, and chemical unloading. All materials within area are stored inside a building with the exception of propane.

Drainage Area 3 (Outfall #006, northeasterly of the chip pile): As shown on Attachment B of this Fact Sheet, this area is located on the northeast side of the site, encompasses approximately 8.53 acres, and is associated with one (1) discharge point, Outfall 006. Outfall 006 is an 18" corrugated metal pipe that serves as an outlet to a storm water detention pond. Slopes in this area allow stormwater to sheet flow across the partially vegetated wood chip storage yard to a grass swale that directs runoff to the detention basin. Industrial activities that have the potential to impact storm water within this area are wood chip storage, wood chip unloading, and hydraulic equipment operation.

Drainage Area 4 (Outfall #007, northeasterly of the chip pile): As shown on Attachment B of this Fact Sheet, this area is located on the northeast side of the site, encompasses approximately 3.49 acres, and is associated with one (1) discharge point, Outfall 007. Outfall 007 is an 18" corrugated metal pipe that serves as an outlet to a storm water detention pond. Slopes in this area allow stormwater to sheet flow across the

2. PERMIT SUMMARY (cont'd)

partially vegetated wood chip storage yard to a grass swale that directs runoff to the detention basin. Industrial activities that have the potential to impact storm water within this area are wood chip storage, diesel fuel unloading, and diesel fuel storage.

Drainage Area 5 (Outfall #008, northeasterly of the chip pile): As shown on Attachment B of this Fact Sheet, this area is located on the northeast side of the site, encompasses approximately 1.55 acres, and is associated with one (1) discharge point, Outfall 008. Outfall 008 is an 18" corrugated metal pipe that serves as an outlet to a storm water detention pond. There are no industrial activities that have the potential to impact storm water in this area.

e. Waste Water Treatment – The only waste water stream that receives any formal treatment is the building and equipment drain water and minor quantities of storm water that is collected in a sump. The waste waters pass through an oil/water separator before being discharged. All sanitary waste waters generated by employees at the facility are disposed of via an on-site subsurface waste water disposal system.

3. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment, be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, Maine law, 38 M.R.S.A., Section 420, and Department Regulation Chapter 530.5, *Surface Water Toxics Control Program* requires the regulation of toxic substances at the levels set forth for Federal Water Quality Criteria as published by the U.S. Environmental Protection Agency pursuant to the Clean Water Act.

4. RECEIVING WATER QUALITY STANDARDS:

Maine law, 38 M.R.S.A., Section 467(7)(A)(4) states that the Penobscot River, at the point of discharge, is classified as a Class B waterway. Maine law, 38 M.R.S.A., Section 465(3) contains the classification standards for Class B waters.

5. EXISTING WATER QUALITY CONDITIONS

Table Category 5-A entitled, *Rivers and Streams Impaired By Pollutants Other Than Those Listed in 5-B Through 5-D (TMDL required)*, in a document entitled, State of Maine Department of Environmental Protection, 2002 Integrated Water Quality Monitoring and Assessment Report, published by the Department lists the Penobscot River main stem from Cambolasse Stream to the Piscatquis River as having the designates uses of aquatic life, dissolved oxygen criteria and fishing (consumption) as impaired. The table lists nutrients and dioxin from industrial, municipal and non-point sources as causing or contributing to the impairment.

The Department issued a draft report entitled, *Penobscot River Modeling Report, March 2003*, that outlined the results of a water quality study conducted during the summers of 1997 and 2001, on the Penobscot River main stem ranging from Millinocket to Bucksport (103 miles). The Department identified 51 miles of the river (all classified as Class B) as in non-attainment of the Class B dissolved oxygen standards due to the point source discharges of biochemical oxygen demand (BOD) and phosphorus as the primary cause of the non-attainment (impairment).

The report recommends significant reductions in license limits for BOD and a reduction in the quantity of phosphorus currently being discharged to meet water quality standards for dissolved oxygen established in state law. It is noted the Indeck facility has not been identified as a discharger that is causing or contributing to any of the impairment issues cited above.

The Department is scheduled to perform a comprehensive evaluation of the data collected and calibrate an existing model of the river in calendar year 2005 and if necessary, prepare a total maximum daily load (TMDL) for segments of the river not attaining the standards of their assigned classification(s). If the evaluation and modeling runs determine that at full permitted discharge limits the discharge from the Indeck facility is causing or contributing to the non-attainment, this permit will be re-opened per Special Condition F, *Reopening of Permit For Modifications*, to impose more stringent limitations to meet water quality standards.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS:

The EPA has developed National Effluent Guidelines and Standards found at 40 CFR, Part 423, *Steam Electric Power Generating Point Source Category,* for facilities such as the IME facility. Effluent limitations and monitoring requirements in Special Condition A of this licensing action were derived as follows:

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

OUTFALL #001-Cooling Tower Blowdown - Waste waters discharged from this outfall are categorized as cooling tower blown waste waters pursuant to federal regulation, 40 CFR, §423.12(b)(7). Limits on parameters are specified to ensure attainment of the in-stream water quality criteria and that best practicable treatment (BPT) is utilized. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT based limits.

a. Flow: The daily maximum limit of 150,000 gallons per day (gpd) in the previous licensing action is being carried forward in this permitting action. The limitation was derived as a best professional judgment of a limitation that was representative of discharge flows during normal operating conditions. Discharge Monitoring Report (DMR) data for the period 6/98 through the present indicates the daily maximum flow discharged ranges from 8,400 gpd to 135,000 gpd with an arithmetic mean of 76,000 gpd.

b. Temperature: The daily maximum temperature limit of 85°F in the previous licensing action is being carried forward in this permitting action. The limitation was derived as a best professional judgment of a limitation that was representative of the temperature of the discharge during normal operating conditions. DMR data for the period 6/98 through the present indicates the daily maximum temperature of the discharge ranges from 67 °F to 85 °F with a summertime (June 1 – September 30) mean of 80 °F and a wintertime mean of 72°F.

c. Free Available Chlorine - The monthly average and daily maximum technology based chlorine limitations of 0.2 mg/L and 0.5 mg/L are being carried forward from the previous permitting action and are based on the best practicable treatment (BPT) limitation found in 40 CFR, §423.12(b)(7). DMR data for the period 6/98 through the present indicates chlorine concentrations of the discharge range from 0.02 mg/L to 0.09 mg/L as a monthly average and from 0.04 mg/L to 0.18 mg/L as a daily maximum.

d. pH – The previous licensing action established a technology based pH range limitation of 6.0 –9.0 standard units (SUs) based on federal regulation 40 CFR, §423.12(b)(1). The DMR data for the period 6/98 through the present indicates the pH of the discharge has ranged from 6.9 to 8.4 SUs.

OUTFALL #002- Low Volume Waste Waters - From building and equipment drain waters. Waste waters discharged from this outfall are categorized as low volume waste waters pursuant to federal regulation, 40 CFR, §423.12(b)(3). Limits on parameters are specified to ensure attainment of the in-stream water quality criteria and that BPT is utilized. Licenses issued by this Department impose the more stringent of the calculated water quality based or BPT based limits.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

e. Flow: The previous licensing action established a daily maximum flow limitation of 1,000 gpd. The limitation was derived as a best professional judgment of a limitation that was representative of flows during normal operating conditions. The limitation is being carried forward in this permitting action and remains representative of the discharge. The DMR data for the period 6/98 through the present indicates the daily maximum flow discharged ranges from 240 gpd to 920 gpd with an arithmetic mean of 600 gpd.

f. Total Suspended Solids (TSS) - The previous licensing action established monthly average and daily maximum technology based concentration limitations of 30 mg/L and 100 mg/L respectively, and are being carried forward in this permitting action. The limits are consistent with the BPT limits for TSS established in federal regulation 40 CFR §423.12(b)(3). The DMR data for the period 6/98 through the present indicates the daily maximum concentrations discharged ranges from <5 mg/L – 23 mg/L with an arithmetic mean of 8 mg/L and the monthly average concentrations discharged ranges from <5 mg/L – 12 mg/L with an arithmetic mean of 6 mg/L.

g. Oil and Grease: - The previous licensing action established a Department BPT daily maximum technology based concentration limitation of 15 mg/L. It is noted this limitation is more stringent than the daily maximum technology based limit of 20 mg/L established in federal regulation 40 CFR §423.12(b)(3). The Department's limitation of 15 mg/L is being carried forward in this permitting action. The DMR data for the period 6/98 through the present indicates the daily maximum concentrations discharged ranges from <5 mg/L – 9.6 mg/L with an arithmetic mean of 6 mg/L.

h. Temperature: A previous licensing action established a daily maximum temperature limit of 80°F that is being carried forward in this permitting action. The limitation was derived as a best professional judgment of a limitation that was representative of the temperature of the discharge during normal operating conditions. The DMR data for the period 6/98 through the present indicates the daily maximum temperatures of the discharge range from 54°F to 70°F with an arithmetic mean of 57°F.

i. pH - The previous licensing action established a technology based pH range limitation of 6.0 –9.0 standard units (SUs) based on 40 CFR, §423.12(b)(1). The DMR data for the period 6/98 through the present indicates the pH of the discharge has ranged from 6.3 to7.8 SUs.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

OUTFALL #003- Sand Filter Backwash Waters - Waste waters discharged from this outfall are also categorized as low volume waste waters pursuant to federal regulation, 40 CFR, §423.12(b)(3). Limits on parameters are specified to ensure attainment of the in-stream water quality criteria and that BPT is utilized. Permits issued by this Department impose the more stringent of the calculated water quality based or BPT based limits.

j. Flow: The previous licensing action established a daily maximum flow limitation of 36,000 gpd and a monthly average "report" only requirement.The DMR data for the period 6/01 through the present indicates the daily maximum flow discharged ranges from 1,200 gpd to 8,700 gpd with an arithmetic mean of 7,300 gpd.

k. Total Suspended Solids (TSS) - The previous licensing action established a monthly average and daily maximum technology based concentration limitations of 30 mg/L and 100 mg/L respectively. The limits are consistent with the BPT limits for TSS established in federal regulation 40 CFR §423.12(b)(3). The DMR data for the period 6/01 through the present indicates the daily maximum concentrations discharged ranges from 43 mg/L – 143 mg/L with an arithmetic mean of 45 mg/L and the monthly average concentrations discharged ranges from <7 mg/L – 54 mg/L with an arithmetic mean of 31 mg/L.

l. pH -The previous licensing action established a technology based pH range limitation of 6.0 –9.0 standard units (SUs) based on federal regulation 40 CFR, §423.12(b)(1). The DMR data for the period 6/98 through the present indicates the pH of the discharge has ranged from 6.9 to 8.5 SUs.

Outfalls #004, #005, #006, #007 and #008 - Storm water runoff from the facility is managed and treated via four detention ponds surrounding the power plant. Prior to this permitting action, storm water runoff was regulated via a Multi-Sector General Permit issued by the USEPA on October 30, 2000. The permittee has requested the Department incorporate authorization to discharge storm water runoff in this permitting action to consolidate permits for the facility. Therefore, this permit requires the permittee to maintain an up-to-date Storm Water Pollution Prevention Plan (SWPPP).

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has made a determination based on a best professional judgment that the existing water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the waterbody to meet standards for Class B classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the Bangor Daily News newspaper on or about February 25, 2005. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permit shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

9. DEPARTMENT CONTACTS

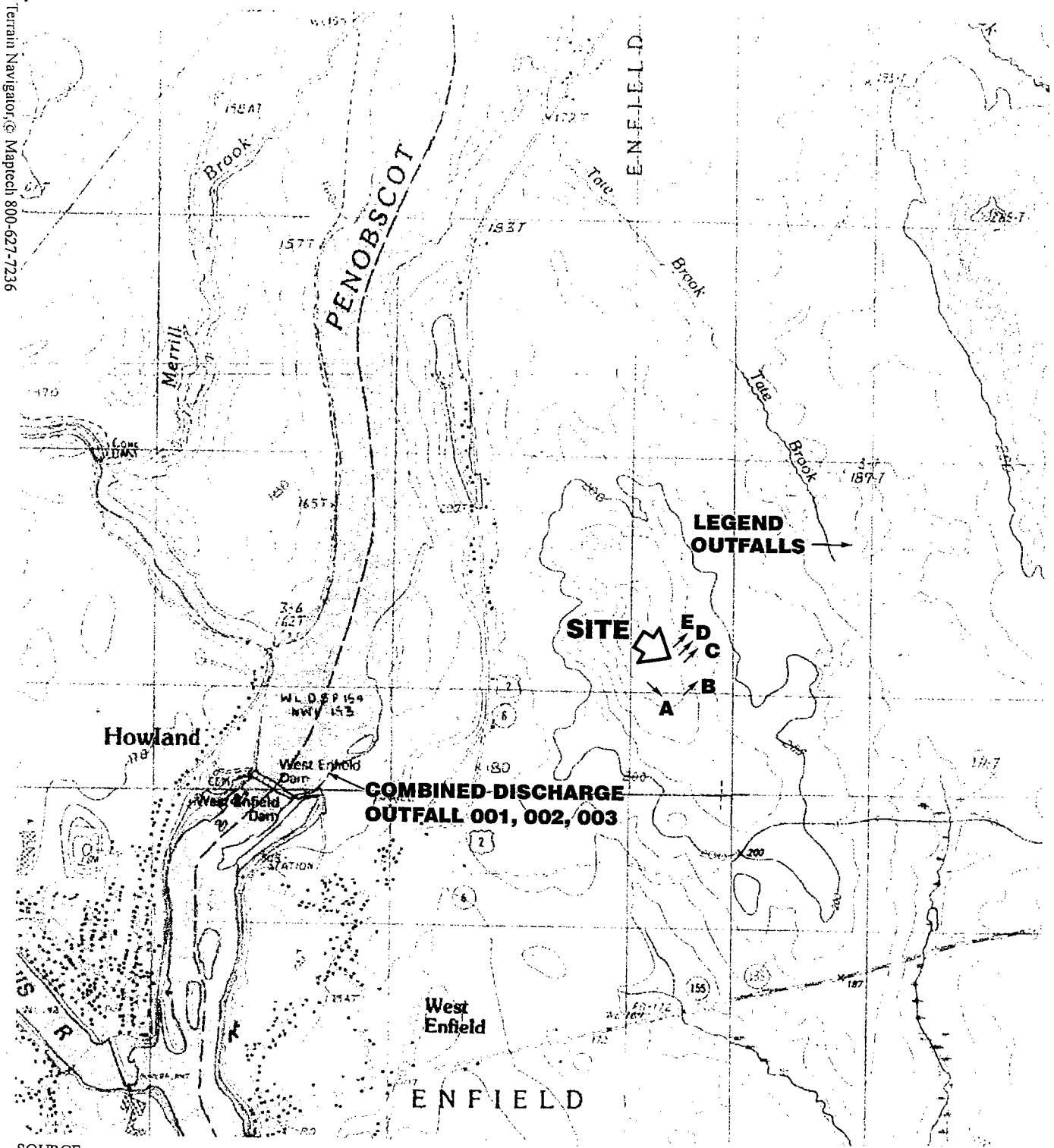
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Gregg Wood
Division of Water Resource Regulation
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone (207) 287-3901

10. RESPONSE TO COMMENTS

During the period of April 26, 2005, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from Indeck's Enfield facility. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comment

ATTACHMENT A



SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
WEST ENFIELD, MAINE
@ 1: 24 000

C E S
1978 INC
ENGINEERS • SURVEYORS
465 So. Main Street P.O. Box 639 Brewer, ME 04412
Tel: 207-989-4824 FAX 207-989-4881

INDECK MAINE ENERGY, LLC
WEST ENFIELD FACILITY
WEST ENFIELD, MAINE
LOCATION MAP

DATE: 2/25/05
Jn: 4100

ATTACHMENT B